

Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

In the Matter of)	
)	
Improving Spectrum Efficiency Through)	WT Docket No. 12-64
Flexible Channel Spacing and Bandwidth)	
Utilization for Economic Area-based 800)	
MHz Specialized Mobile Radio Licensees)	
)	
Request for Declaratory Ruling that the)	WT Docket No. 11-110
Commission Rules Authorize Greater than)	
25 kHz Bandwidth Operations in the 817-)	
824/862-869 MHz Band)	

To: Marlene H. Dortch, Secretary
For transmission to: The Commission

**PETITION FOR RECONSIDERATION
AND INFORMAL INTERFERENCE COMPLAINT REGARDING
AT&T MOBILITY AND SPRINT NEXTEL**

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SUMMARY

Pursuant to section 1.429 of the Commission's rules, the Orange County Sheriff's Department ("OCSD" or "County") hereby petitions the Commission for reconsideration of its determination authorizing Economic Area ("EA")-based 800 MHz Specialized Mobile Radio ("SMR") licensees in the 858.5-869 MHz portion of the 800 MHz band to conduct early testing and deployment of wideband CDMA in the non-reconfigured portion of the band along the U.S.-Mexico border prior to the completion of 800 MHz reconfiguration.¹ Orange County, and possible other licensees in the Southern California region within the U.S.-Mexico border, continue to suffer harmful interference from Nextel iDEN operations as well as from other carriers operating wideband CDMA networks. The Commission's *800 MHz Reconfiguration Report & Order* never contemplated early deployment by SMR carriers like Sprint Nextel prior to band reconfiguration.² Based on harmful interference the County is receiving from a

¹ Improving Spectrum Efficiency Through Flexible Channel Spacing and Bandwidth Utilization for Economic Area-based 800 MHz Specialized Mobile Radio Licensees; Request for Declaratory Ruling that the Commission's Rules Authorize Greater than 25 kHz Bandwidth Operations in the 817-824/862-869 MHz Band, WT Docket No. 12-64, WT Docket No. 11-110, *Report & Order*, 2012 WL 1898737, (2012) (*Report & Order*). OCSD submits this amended petition and informal complaint due to formatting errors, and asks that it may withdraw its prior petition filed on July 9, 2012 at 2:26 PM.

² Improving Public Safety Communications in the 800 MHz Band; Consolidating the 800 and 900 MHz Industrial/Land Transportation and Business Pool Channels; Amendment of Part 2 of the Commission's Rules to Allocate Spectrum Below 3 GHz for Mobile and Fixed Services to Support the Introduction of New Advanced Wireless Services, including Third Generation Wireless Systems; Petition for Rule Making of the Wireless Information Networks Forum Concerning the Unlicensed Personal Communications Service; Petition for Rule Making of UT Starcom, Inc., Concerning the Unlicensed Personal Communications Service; Amendment of Section 2.106 of the Commission's Rules to Allocate Spectrum at 2 GHz for use by the Mobile Satellite Service; WT Docket No. 02-55, ET Docket No. 00-258, RM-9498, RM-10024, ET Docket No. 95-18, *Report and Order, Fifth Report and Order, Fourth Memorandum Opinion and Order, and Order*, 19 FCC Rcd 14969, ¶ 1 (2004) (*800 MHz Reconfiguration Report and Order*).

wideband operator, OCSD believes that it will receive harmful interference from early testing and deployment of wideband CDMA by Sprint Nextel and that the Commission should not approve early deployment until reconfiguration is completed in the U.S.-Mexico border region. The current notice requirements authorized by Sprint Nextel's waivers and special temporary authorizations,³ now made permanent by the *Report & Order*, are woefully inadequate in assisting the County and other public safety licensees in this region with monitoring the activation of Sprint Nextel wideband CDMA sites and determining whether and where interference is occurring. The Commission should continue to focus on resolution of the existing interference problems in this region and not allow interference problems to be exacerbated.

OCSD requests that the Commission deny early testing and deployment of wideband CDMA by SMR licensees in the non-reconfigured portion of the 858.5-869 MHz band in the U.S.-Mexico border region. In the alternative, OCSD requests the Commission adopt heightened notice requirements such that a SMR licensee shall provide an 800 MHz licensee that has not reconfigured in the U.S.-Mexico border region with the location, activation date, ERP, antenna height and channels in use of any proposed wideband site. The Commission should do this by modifying section 90.675 of its rules to allow for individual information exchange with a SMR licensee and/or clarify that section 90.675 already allows licensees like OCSD to utilize this information exchange procedure.

In accordance with section 90.673 of the Commission's rules, OCSD also files this Petition as an informal complaint of interference regarding the carriers and locations described herein.

³ See Sprint Nextel Call Signs WPLM660, WPLM661, WQNX442, WQNX443, WQNX444, WQOQ770, WQOQ771, WQOQ772, and WQOU823. Call sign WQOQ771 is the call sign at issue in this Petition.

I. BACKGROUND

The County of Orange, through the Orange County Sheriff's Department and by way of a joint agreement, operates a \$100 million, countywide 700 MHz/800 MHz public safety communications system on behalf of 34 cities and over a 130 partner agencies that include federal, state and local agencies ranging from the FBI to surrounding counties to school districts and more ("Countywide"). The Countywide system is one of the few truly interoperable voice systems in the United States that began operation in the late 1990s, and is a system utilized by law, fire, lifeguard, paramedics, public works and other governmental services. The Countywide system is comprised of 28 high sites interspersed throughout Orange County and has over 22,000 mobile and portable subscriber radios.

As of the 2010 census, Orange County is the third largest county in the State of California and is the sixth largest county in the U. S. with a population of 3,018,963. Orange County is surrounded by and is mutual aid partners with three of the largest counties in the U.S., Los Angeles County (9,818,605), San Diego County (3,095,313) and San Bernardino County (2,035,210). The Southern California region is home to more natural disasters than any other area of the country including fires, floods, landslides and earthquakes. Orange County and its sister counties lie within the region impacted by the forthcoming U.S.-Mexico treaty, and at this time is unable to begin reconfiguration due to protracted negotiations between the two countries that have led to significant delays in Wave 4.

Around July 4, 2011, the busiest day for the Countywide system, the County and its partner city, the City of Huntington Beach, experienced harmful interference along Pacific Coast Highway at one of the busiest Fourth of July locations in the state where a portion of the highway at its most frequented visitor location is closed to vehicular traffic. This location is near

Pacific Coast Highway and Main Street and is home to a number of shops, restaurants, hotels, the pier and one of the top surfing beaches in the country. Fourth of July celebrations in this area warrant high law enforcement presence. The County and City experienced harmful interference from Sprint Nextel's iDEN operations and AT&T's wideband CDMA operations. At this time, Sprint Nextel has largely remediated its interference issue, but harmful interference continues from AT&T. A similar harmful interference incident occurred in the City of Westminster, which is also attributable to AT&T's wideband CDMA technology, completely preventing the City from using any of its portable radios in the area. The bulk of 22,000 Countywide portable radios are Motorola XTS-3000 radios, which cannot be used near the interference locations. Both incidents have been band-aided in that AT&T has requested that only XTS-5000 radios be used in this area. The matters are unresolved and are in violation of the Commission's Part 90 interference rules.⁴

On January 10, 2012, OCSD received a letter from Sprint Nextel notifying the County that the company would begin testing 800 MHz wideband CDMA in the Los Angeles region, which includes Orange County.⁵ The letter offered no meaningful information as to when or where Sprint Nextel sites would be activated or the ERP such sites would produce. Like all public safety systems, OCSD cannot monitor its system for interference caused to portable and mobile radios and must wait for a subscriber complaint (usually law enforcement when responding to an incident). OCSD and many members of the frequency coordinator (California

⁴ A detailed description and analysis of the harmful interference experienced by the County and cities is attached hereto as Exhibit A.

⁵ Letter from James Goldstein, Director, Spectrum Reconfiguration, Sprint Nextel, to James Donovan, Chairperson, Region 5 NPSPAC Planning Committee (Jan. 10, 2012) (*Sprint Nextel Notification*), attached hereto as Exhibit B.

Public Safety Radio Association) in the Southern California region were unaware of waivers and special temporary authorizations that were granted to Sprint Nextel due to ministerial actions taken by Commission staff with no notice to affected licensees or the frequency coordinator and no public comments sought. At the time OCSD received Sprint Nextel's notification letter, OCSD and other local agency partners were deeply troubled by the lack of information in the notification and believed it to be unlawful and against the spirit of the Commission's *800 MHz Reconfiguration Report & Order*. On February 28, 2012, OCSD sent a letter to the Wireless Telecommunications Bureau and the Public Safety & Homeland Security Bureau objecting to Sprint Nextel's early testing and deployment in non-reconfigured spectrum along the U.S.-Mexico border and cited evidence of harmful interference from wideband CDMA.⁶ OCSD did not receive a response from the Bureaus. OCSD sent its letter to the correct Bureaus but later learned that the letter was internally routed to another division as a "consumer" complaint against Sprint Nextel.⁷ In April, OCSD received a call from Sprint Nextel that it had assigned *OCSD's Letter* an internal case number. On May 15, 2012, OCSD conducted a conference call with James Goldstein and other senior officers from Sprint Nextel describing the interference issues and the reason for the *OCSD Letter*. Shortly thereafter, OCSD learned of the Commission's *Notice* of the current proceeding⁸ and that it was foreclosed from providing any

⁶ Letter from Robert Stoffel, Director, Communications & Technology Division, Orange County Sheriff's Department, to Rick Kaplan, Chief, Wireless Telecommunications Bureau, Federal Communications Commission (Feb. 28, 2012) (*OCSD Letter*), attached hereto as Exhibit C.

⁷ Letter from James Goldstein, Director, Spectrum Reconfiguration, Sprint Nextel, to Sharon Bowers, Chief, Consumer Inquiries and Complaint Division, Consumer & Governmental Affairs Bureau, Federal Communications Commission (May 17, 2012), attached hereto as Exhibit D.

⁸ Improving Spectrum Efficiency Through Flexible Channel Spacing and Bandwidth Utilization for Economic Area-based 800 MHz Specialized Mobile Radio Licensees; Request for Declaratory Ruling that the Commission's Rules Authorize Greater than 25 kHz Bandwidth

comment or evidence of interference due to the Sunshine Period in effect. Immediately upon expiration of the Sunshine Period, OCSD gave an oral *ex parte* presentation to members of the WTB and PS&HSB describing its objections and requesting assistance with resolution of interference issues.⁹

OCSD believes that its only recourse is to file this Petition for Reconsideration as no other options exist. OCSD is supportive of eliminating legacy rules as they apply to future deployment by Sprint Nextel, but OCSD cannot support early deployment prior to reconfiguration. OCSD believes that early testing and deployment of wideband CDMA prior to the completion of reconfiguration will exacerbate interference issues in the region and negatively impact first responders and the public at large during emergency incidents, as has already occurred. OCSD further believes that the current notification requirements from the ministerial waivers and STAs and from the *Report & Order* do not assist public safety with identifying harmful interference as it is impossible to monitor a system for interference to mobile and portable radios and is a reactive process that does not protect first responders. OCSD has spoken with other public safety licensees in the U.S.-Mexico border region who are supportive of this Petition and believe that SMR licensees should not be provided early testing and deployment approval prior to the completion of reconfiguration.

Operations in the 817-824/862-869 MHz Band, WT Docket No. 12-64, WT Docket No. 11-110, *Notice of Proposed Rulemaking*, 27 FCC Rcd 2742 (2012) (*Notice*).

⁹ *Ex Parte* of OCSD (filed June 7, 2012).

II. DISCUSSION

A. The 800 MHz Reconfiguration Report & Order Set Forth Broad Protections for Public Safety

In 2004, the Commission adopted a reconfiguration plan for the 800 MHz band that would abate interference from 800 MHz SMR licensees and cellular systems. It was recognized in the *800 MHz Reconfiguration Report & Order* that case-by-case remediation and application of technical fixes would not solve the harmful interference public safety was experiencing from Sprint Nextel iDEN operations, but that portions of the 800 MHz band needed to be reconfigured in order to properly protect public safety. In what was phrased as an “Entitlement to Interference Protection,” the Commission recognized that it was “affording full protection against unacceptable interference,”¹⁰ and it established certain goals related to the 800 MHz proceeding:

- abating harmful interference currently being encountered by 800 MHz public safety systems;
- minimizing disruption to existing services;
- responsibly managing the spectrum involved—constituting portions of the 700 MHz, 800 MHz, 900 MHz and 1.9 GHz bands; and
- providing additional spectrum rights for public safety.¹¹

The Commission recognized the significance of grouping technically compatible public safety systems in close spectrum proximity and that spectrally separating incompatible systems such as through the use of guard bands required direct regulatory intervention.”¹²

¹⁰ *800 MHz Reconfiguration Report & Order*, 19 FCC Rcd at 14982, ¶ 19.

¹¹ *Id.* at 15050, ¶ 151.

¹² *Id.* at 15036, ¶ 121.

B. There is Strong Potential for Interference in Non-Reconfigured Spectrum in the U.S.-Mexico Border Region That Has Not Been Considered by the Commission

On June 30, 2011, the Commission sought comment on Sprint Nextel's petition for declaratory ruling requesting authorization to deploy wideband CDMA in ESMR band 862-869 MHz and inquired of possible interference to adjacent services.¹³ APCO and NPSTC filed comments expressly opposing wideband operations where NPSPAC reconfiguration was not 100 percent completed, particularly in the higher density population areas of the country.¹⁴ NPSTC documented the inherent incompatibility between the deployment of wideband in portions of ESMR spectrum and the continued delays in completing 800 MHz rebanding.¹⁵

Sprint Nextel contended that the current 800 MHz reconfiguration rules protected public safety licensees, and it provided the Commission a theoretical intermodulation testing report.¹⁶ The IM testing report was accompanied by letters from Sprint Nextel's equipment suppliers, which have vested financial interests in seeing the deployment of wideband CDMA, with the same cut-and-paste, conclusory statement used verbatim in all three letters that "the interference

¹³ Wireless Telecommunications Bureau Seeks Comment on Petition From Sprint Nextel to Allow Wideband Operations in 800 MHz Enhanced Specialized Mobile Radio Service Bands, WT Docket No. 11-110, *Public Notice*, 26 FCC Rcd 9428 (2011). Request for Declaratory Ruling That The Commission's Rules Authorize Greater Than 25 kHz Bandwidth Operations In The 817-824/862-869 MHz Band, *Petition for Declaratory Ruling*, WT Docket No. 11-110, at 1 (filed June 3, 2011).

¹⁴ Comments of APCO at 2 (filed Aug. 1, 2011); Comments of NPSTC at 6 (filed August 1, 2011).

¹⁵ Comments of NPSTC at 5 (filed Aug. 1, 2011).

¹⁶ Reply Comments of Sprint Nextel (filed Aug. 16, 2011).

potential for CDMA operations at 800 MHz will be no greater than the risk of interference from post-rebanded iDEN operations.”¹⁷

On March 7, 2012, the Commission released its *Notice* tentatively concluding that there was no interference controversy based on Sprint Nextel’s IM testing report. In response to the *Notice*, nine public safety licensees filed comments that Sprint Nextel’s study was inadequate in that Sprint submitted an intermodulation study and not an OOB study, and that its claims regarding filtering requirements could not be verified through a third party analysis as Sprint did not provide any specifications for its filters.¹⁸ Sprint Nextel filed comments and reply comments most of which attempted to re-frame the interference discussion in terms of “innovation” and “spectrum efficiency” encouraging the Commission to move expeditiously.¹⁹ Sprint Nextel did not respond directly to public safety commenters or demonstrate the insufficiency of those comments, such as providing filter specifications, but instead baldly stated that there was no direct evidence in the record disproving its study.

OCSD’s Letter to the Commission, sent prior to the release of the *Notice* was not considered in the *Report & Order*. OCSD objected to the early deployment in non-reconfigured spectrum on the basis that OCSD had real world evidence of harmful interference the County was receiving from AT&T wideband CDMA that prevents use of a majority of the Countywide portable radios at various locations. OCSD contends that while ESMR licensees should eventually be allowed to wideband their operations, the record is inadequate and the Commission

¹⁷ *Id.* at Exhibit A.

¹⁸ Joint Comments of Public Safety Licensees at 7-8.

¹⁹ Comments of Sprint Nextel at 4-8 (filed Apr. 16, 2012).

should reconsider its decision due to circumstances in the public interest that show that harmful interference will likely result from early deployment in the U.S.-Mexico border region.

In its *Notice*, the Commission asked for specific explanations of interference and any supporting data.²⁰ Exhibit A of this Petition contains the statement of the County's chief radio engineer regarding actual harmful interference to the County from two AT&T wideband CDMA locations whereby law and fire in the Cities of Huntington Beach and Westminster are unable to communicate on Motorola XTS-3000 portable radios (that comprise the bulk of the Countywide fleet), with one location being one of the busiest areas of the County. Both cases of interference remain unresolved and have been merely "band-aided." Although the Commission sought specific data, it is impossible for OCSD to provide fully accurate and complete details of the sites or the interference as carrier RF engineers responding to interference complaints do not typically share site details and equipment information with public safety engineers (although many do indeed assist in resolving the interference complaint).

The *Report & Order* only considered two types of interference – intermodulation and OOBE – and Sprint Nextel's study only considered the theoretical basis of intermodulation.²¹ As is indicative in the ongoing *Lightsquared* proceeding, there are other forms of interference that should be considered by the Commission such as receiver desensitization and brute force overload. This interference results from strong local carriers deploying wideband CDMA and other forms of broadband that overload sensitive devices such as BDAs and tower top amplifiers

²⁰ *Notice* at 2747-48.

²¹ Reply Comments of Sprint Nextel at Exhibit B. Intermodulation testing is essentially a theoretical test of mixing certain frequencies. Intermodulation testing cannot simulate actual real world examples as a cellular site can be comprised of any number of antennas, ERP and other devices. It should also be noted that Sprint Nextel's study did not test Motorola XTS-3000 portables.

by brute force overload, even from out of band transmitters. Additionally, near/far interference occurs when a public safety agency is using distant radio sites and the interference source is close to a public safety mobile or portable, such as being parked near a cell/wideband site. Transmitter noise and other interference from the local cell site (where wideband CDMA will be collocated) can mask the proper received signal causing degradation or desensitization. In fact, the Commission acknowledged this in 2004 in the *800 MHz Reconfiguration Report & Order*, that wider bandwidth carriers that used CDMA technology would produce interference with wider bandwidths and affect more frequencies.²²

In this vein, the Commission's record is incomplete. It is impossible for the Commission to have determined that there is no harmful interference potential when the sole document in the two proceedings is a theoretical study submitted by Sprint Nextel that completely focused on only one form of interference (intermodulation), that provided information that could not be verified by third party analysis, was not performed under any real world conditions (such as could be done at a Sprint Nextel site that has obtained a waiver and STA near a public safety licensee), and that was supported entirely by statements of equipment vendors that have financial interests in the quick deployment of wideband CDMA. The Commission should carefully examine OCSD's interference cases, and require an independent third party to study all possible forms of interference.

C. The Public Interest Supports the Commission Reconsidering Its Determination to Allow Early Testing and Deployment of CDMA by ESMR Licensees

The *800 MHz Reconfiguration Report & Order* did not contemplate, analyze or discuss early testing and deployment of wideband technology prior to the completion of reconfiguration, and comments were never sought on this issue as part of those proceedings. Although it was

²² *800 MHz Reconfiguration Report & Order* at 15046, ¶ 144.

anticipated that reconfiguration would occur in transitional phases, the public safety community would never have supported early testing and deployment prior to reconfiguration if comments had been sought at that time when the entire public safety community was actively monitoring those proceedings. The public safety licensees that OCSD has spoken with since it learned of the *Notice* have largely communicated their opposition to early deployment of wideband technology and are confounded that the Commission would approve such deployment contrary to the spirit of the 800 MHz rebanding proceeding, which was to abate interference and afford heightened protections to public safety.

Instead, the WTB issued ministerial authorizations with no notice to or comments taken from affected public safety licensees in the U.S.-Mexico border region.²³ However, there is nothing in the *800 MHz Reconfiguration Report & Order* that contemplated that the Commission or Commission staff would undo rebanding protections without additional comment proceedings or notice to affected licensees. Comments should have been requested prior to issuing any waivers or STAs as approval of early deployment of wideband is not a ministerial issue or function that Commission staff should have the ability to perform without an open and formal Commission proceeding. The act of approving early deployment of wideband with so limited a record is a discretionary action that is beyond the scope of delegated authority and can only be done by the Commission itself or after significant notice and comments taken from the public and affected public safety licensees.²⁴ These approvals had the effect re-writing portions of the

²³ See e.g., Letters to James Goldstein, Director, Spectrum Reconfiguration, Sprint Nextel, from Roger Noel, Chief, Mobility Division, Wireless Telecommunications Bureau, Federal Communications Commission (March 14, 2011; Apr. 8, 2011; June 27, 2011).

²⁴ It should be noted that the WTB has recently sought comment on a waiver/STA request despite not doing so for the call signs in question. Wireless Telecommunications Bureau Seeks Comment On Petition from Sprint Nextel to Allow Wideband Operations in 800 MHz Enhanced

800 MHz Reconfiguration Report & Order. This exact same issue has occurred in the current *Lightsquared* proceeding whereby Commission staff ministerially allowed special temporary authorizations for broadband operations that have the effect of desensitizing and overloading public safety and military GPS receivers.

The *800 MHz Reconfiguration Report & Order* expressly held that there was a high burden for waivers in light of the interference potential in the band.²⁵ In reviewing the waiver/STA letters issued by the Mobility Division, Commission staff only considered the uniqueness and burden of widening the channels and did not weigh the public interest in terms of public safety licensees continuing to operate in non-reconfigured spectrum. Commission staff only analyzed OOBE and did not analyze any other form of interference. In light of the arguments discussed herein, the public interest demands that the Commission reconsider its adoption of the *Report & Order* as well as the waivers and STAs that have been given in the U.S.-Mexico border region as early deployment of wideband prior to reconfiguration may cause irresolvable and harmful interference to a region comprised of over 15,000,000 people.

The public interest also supports reconsidering the *Report & Order* as local governments do not have the resources to expedite a challenge to a permanent approval for early deployment of wideband. At the Commission's Open meeting adopting the *Report & Order*, WTB staff was commended for its speed in issuing a *Notice*, considering public comments and preparing a

Specialized Mobile Radio Service Bands, WT Docket 11-110, *Public Notice* (June 30, 2011). It should also be noted that Sprint Nextel is seeking to renew its STA for call sign WQQQ771 pending July 9, 2012. Letter to Roger Noel, Chief, Mobility Division, Wireless Telecommunications Bureau, Federal Communications Commission, from James Goldstein, Director, Government Affairs, Sprint Nextel (June 19, 2012). To the extent there is time remaining under the STA, OCSD opposes this renewal request for the legal and policy reasons discussed herein.

²⁵ *800 MHz Reconfiguration Report & Order* at 15061, ¶ 173.

Report & Order for adoption in 76 days – just over two months. The County of Orange has a robust and highly trained in-house RF engineering staff, more so than many other public safety communications departments around the country. However, as a point of consideration, these resources are waning, largely due to the economic environment where budgets have been slashed and positions have been cut or not replaced. Local governments do not have the resources to track Commission ministerial actions, track approvals that come out of Bureaus other than the PS&HSB and be able to respond adeptly and make comments in a timely fashion. Organizations like APCO and NPSTC provide a tremendous service to public safety, but there are some on the ground details and issues that can only be provided directly, like the case at hand. Certainly, most local governments could not review the Notice, conduct a request for proposals for an RF consultant to review Sprint Nextel’s IM study, receive approval from their governing bodies for a consultant contract, draft a report, go back to their governing board for approval to file comments at the Commission and then actually file comments – all within the 76 day period. In short, the Commission should also reconsider its approval on the grounds that it acted too quickly with the effect of stymieing those licensees in the U.S.-Mexico border region from properly commenting and submitting proper analyses.

D. The Commission’s Notification Requirements Are Inadequate and Provide No Meaningful Information to Public Safety

Exhibit B of this Petition contains the *Sprint Notification* to public safety licensees. The notification only provides the date “after which” testing and operation will commence, the general region where deployment will occur, and references that operations will be expanded. This information is unhelpful to public safety.

Sprint Nextel has as huge number of cell sites in the greater Los Angeles region that includes Orange County. The total square miles of the greater Los Angeles region and its

surrounding area is considerable – Los Angeles County (4,309), Orange County (790), San Diego County (4,206), San Bernardino County (20,056) – and notice to large affected EAs is meaningless without specific location information. It is also impossible to monitor for interference when there is no specific activation information provided to affected licensees. It is not enough to say that activation will occur “after” a certain date when such activation can occur within one day or one hundred days. Specific activation dates and location information is the only meaningful way by which a public safety licensee can monitor potential interference. As discussed previously, it is technically impossible for a public safety licensee to “sit” and monitor its network for harmful interference as is suggested in the *Report & Order*.²⁶ Public safety can actively monitor its network for issues associated with its towers, but it cannot monitor its network issues associated with 22,000 mobile and portable radios.

The *Report & Order* rejected specific activation and location requirements on the grounds that the proposed general notification requirements would “fully inform” public safety, would not further the goals of abating interference, and would impose undue costs on SMR licensees.²⁷ This flies in the face of what the Commission required in the *800 MHz Reconfiguration Report & Order*. Generalized notification requirements do not fully inform public safety because it is impossible to monitor the system as to mobile and portable radio interference. It would be like asking Sprint Nextel to design a system to track all of its handsets. The current requirements do not help abate interference in a geographic area that is as large as Southern California and is as inundated with cellular (and now wideband) towers due to the large population. Sprint Nextel and other SMR licensees never provided evidence of the costs it

²⁶ *Report & Order* at ¶ 14.

²⁷ *Report & Order* at ¶ 14 and 19.

would incur in providing such notice and never quantified these costs in a way as to be deemed “undue” by the Commission. To the contrary, the costs of interference are great as a public safety radio engineer must wait for law enforcement or fire to report an incident, which places that first responder at significant risk of harm for not being able to communicate, and must spend dozens of hours investigating the incident and working with a carrier to mitigate it.

The current notification requirements are not only meaningless, but are reactive and contrary to the policies set forth by the Commission in the *800 MHz Reconfiguration Report & Order*. As the Commission stated in 2004, “In this connection, we note that almost all participants in this proceeding agree that the status quo – addressing interference to public safety systems on an ad hoc basis and reactive fashion – is no longer workable in the 800 MHz band.”²⁸ In the rebanding proceeding, the Commission also defined the public interest in terms of undue costs to public safety and not just in terms of the carrier. “Enhanced Best Practices must remain the remedy of first resort until band reconfiguration is complete – and will remain necessary for otherwise intransigent cases of unacceptable interference, their high transactional cost indicates that it would be unwise to rely on Enhanced Best Practices as the exclusive remedy for interference abatement over the long term.”²⁹

Perhaps most significant, however, was the recognition by the Commission that specific activation and location information was essential to abating interference and minimizing undue costs both to a carrier, which also generates considerable internal costs in investigating interference, and to public safety. “The parameters most relevant to prior notification of a cell

²⁸ *800 MHz Reconfiguration Report & Order* at 15027, ¶ 101.

²⁹ *Id.* at 15036-37, ¶ 121.

are its location, the effective radiated power, the antenna height, and the channels in use.”³⁰ In fact, the Commission’s rules currently require an opt-in information exchange with a carrier prior to the activation or modification of a facility where there is 10 days prior notice of specific activation including location, ERP, antenna height and channels available for use.³¹ Therefore, OCSD requests in the alternative that the Commission modify Section 90.675 for application to the current *Report & Order* for wideband deployment in non-reconfigured spectrum, and/or clarify that section 90.675 may currently be utilized by public safety licensees in the U.S.-Mexico border region to exchange information with wideband operations. Arguably, section 90.675(a) is broadly worded to already allow information exchange related to wideband activation as SMR licensees will collocate wideband CDMA equipment on existing towers and thus succumb to the “modification . . . of a cell site in their area.” A rule modification and/or clarification would not unduly burden Sprint Nextel (as the requirement already exists) by requiring notification letters for every site, but would allow a concerned public safety licensee to effectively monitor its system and proactively work with the carrier on a case-by-case basis. This would ensure meaningful information and would substantially minimize FCC involvement that will result from interference complaints.

III. CONCLUSION

It is anticipated that reconfiguration in this region will begin near the end of 2012 and will take two years or more to complete, particularly when the lower 120 channels have not begun to be cleared. This is potentially two years of interference that public safety did not

³⁰ *Id.* at 15039, ¶ 126. See also Project 39, Interference to Public Safety 800 MHz Radio Systems, *Interim Report to the FCC*, December 24, 2001 at 12-21.

³¹ Section 90.675.

expect to be endured. In 2004, the Commission stated, “If unacceptable interference in the 800 MHz band were to remain unabated, this Commission would fail to achieve one of its prime directives: to manage the spectrum in a manner that promotes safety of life and property.”³² In the spirit of this finding, the Commission should investigate OCSD’s interference complaint and rescind approval of early deployment of wideband CDMA prior to the completion of reconfiguration.

Respectfully submitted,

/s/ Ryan Baron

Ryan M. F. Baron

³² *800 Mhz Reconfiguration Report & Order* at 15010, ¶ 62.

EXHIBIT

A

STATEMENT OF INTERFERENCE

I, Joe Saddler, am the Assistant Director of the Communications & Technology Division of the Orange County's Sheriff's Department ("OCSD/Communications") and the chief radio engineer for the County of Orange, California.

The following is a detailed description of the harmful interference experienced by the County.

Huntington Beach, California (pop. 189,992)

On Saturday, July 2, 2011, the Countywide system experienced harmful interference in the middle of the City's Fourth of July activities impacting Main Street just north of Pacific Coast Highway and the Huntington Beach Pier. The City of Huntington Beach historically shuts down a portion of Pacific Coast Highway for pedestrian traffic only as tens of thousands of visitors crowd into this area. The Fourth of July is one of the busiest times for the Countywide system. The City has a two decade history of Fourth of July festivities, which typically results in unruly behavior.

Because the interference occurred on a holiday weekend when County engineering offices were closed, the interference incident was reported directly to local AT&T Mobility and Sprint Nextel contacts. An immediate response was provided and both carriers worked with County technical staff to make temporary adjustments that eliminated the interference. Harmful interference returned on July 3, well before the end of the holiday weekend. The interference significantly disrupted critical police communications in the Main Street area throughout the whole holiday weekend.

Spectral analysis of the interfering signal indicated a CDMA signature slightly wider than four MHz originating from the AT&T site. This signal is located directly above 869 MHz and adjacent to the County's frequency assignments between 866 and 869 MHz.

Technical follow-up between the County, AT&T and Sprint Nextel began immediately after the holiday on July 5, 2011. OCSD/Communications was taking field measurements as Sprint Nextel and AT&T were making adjustments to their systems. After several weeks of adjustments, it was determined that with only one carrier activated at a time that Sprint could mitigate their interference but AT&T could not.

For the next several months, OCSD/Communications worked directly with AT&T with virtually no progress. Eventually, AT&T recommended programming changes to the City's XTS-5000 portable radios (Motorola). These changes moderated the interference, but made no substantial change. AT&T requested that Huntington Beach only deploy XTS-5000 radios in this geographic area.

OCSD/Communications believes that this is a "band-aid" solution and further maintains that this interference complaint is unresolved. As of today, the XTS-3000 radio, the bulk of our fleet, will not operate in the vicinity of the AT&T site.

Westminster, California (pop. 89,701)

On January 17, 2012, the Westminster Police Department reported interference in the vicinity of the Big Five Sporting Goods store, 14790 Golden West Street. OCSD/Communications investigated the location on January 18, 2012 and confirmed the cause as an AT&T Mobility site.


Spectral analysis of the interfering signal indicated a CDMA signature slightly wider than four MHz originating from the AT&T site. This signal is located directly above 869 MHz and adjacent to our frequency assignments between 866 and 869 MHz. A formal report was made to the publicsafety800MHzinterference.com web site on January 19, 2012. AT&T responded immediately and spent very little effort trying to resolve the interference. Based on AT&T's experience from the Huntington Beach interference incident, AT&T recommended that Westminster only use XTS-5000 portable radios in this area.

OCSD/Communications also believes that this is a "band-aid" solution and further maintains that this interference complaint is unresolved. As of today, the XTS-3000 radio, the bulk of our fleet, will not operate in the vicinity of the AT&T site. A standard issue police portable radio will not work at either of these locations.

Description of Interference and Countywide Effect

OCSD/Communications believes that there are dozens of other AT&T cell sites in Orange County causing similar unresolvable interference that haven't been discovered or reported.

I attest under penalty of perjury that the foregoing is true and correct.



Joe Saddler

EXHIBIT

B



Sprint Nextel
12502 Sunrise Valley Drive
Reston, VA 20196
800MHz@Sprint.com

Joe

January 10, 2012

Region 5 NPSPAC Planning Committee
James C. Donovan, Chairperson
840 N. Eckhoff St., Suite 104
Orange, CA 92868-1021

Re: Sprint Nextel Notification of Initiation of CDMA Operations in the 817-821/862-866 MHz Portion of the 800 MHz Band

Regional Planning Coordinator ("RPC") Notification

Dear Sir or Madam:

Sprint Nextel Corporation ("Sprint Nextel") is sending you this letter because you are one of the Regional Planning Coordinators ("RPC") for the California - South National Public Safety Planning Advisory Committee ("NPSPAC") Region. The FCC has required Sprint Nextel to send a written notice to all public safety agencies authorized for operations in the 800 MHz band in or near the California - South NPSPAC Region (Region 5). In addition, Sprint Nextel is sending a similar letter to all public safety licensees within 70 miles of the boundary of the California - South NPSPAC Region, including the California - South (Region 5), California - North (Region 6), Arizona (Region 3), and Nevada (Region 27) NPSPAC Regions, as well as to the RPCs for these adjoining Regions.

Sprint Nextel is providing this notification that it plans to commence operating an alternative technology network (using Code Division Multiple Access or "CDMA") on a portion of its authorized 800 spectrum in the 817-821 MHz/862-866 MHz portion of the 800 MHz band sometime **after January 25, 2012**. Sprint Nextel's CDMA deployment will neither impact the ongoing 800 MHz band reconfiguration initiative nor any pending retunes. In addition, Sprint Nextel will continue operating its 800 MHz iDEN Network in the 800 MHz band as well. Our new 800 MHz band CDMA operations will enhance Sprint Nextel's existing CDMA service which has operated in the 1.9 GHz band since approximately 1994. **Our 800 MHz CDMA operations will initially be deployed for testing purposes in the Los Angeles metropolitan area of the California - South NPSPAC Region, but our operations will eventually expand throughout Region 5.**

January 10, 2012

Page 2

Sprint Nextel is mindful of its ongoing obligation to avoid causing Commercial Mobile Radio Service ("CMRS") – public safety interference at 800 MHz and to immediately correct such interference should it arise. Sprint Nextel will implement its new CDMA service in full compliance with the FCC's co-channel separation requirements and will carefully evaluate all relevant local factors to assure that interference does not occur.

If at any time, however, you or a licensee in your NPSPAC Region believes that there is an 800 MHz public safety radio system experiencing CMRS – public safety interference within its area of operations, they should report it using the industry developed and maintained interference notification website at <http://www.publicsafety800mhzinterference.com>. This website immediately notifies Sprint Nextel and other cellular carriers operating in your area to commence interference investigation and mitigation procedures in accordance with the FCC's mandated interference response timelines and requirements specified in Section 90.674 of the FCC's rules.

We look forward to our continued work with you and your neighboring agencies while we complete the 800 MHz band reconfiguration. Should you have any questions in this matter, please contact me at 800MHz@Sprint.com, or contact the Sprint Nextel Program Manager responsible for your retune.

Sincerely,

/s/ James B. Goldstein

James B. Goldstein
Director – Spectrum Reconfiguration



Sprint Nextel
12502 Sunrise Valley Drive
Reston, VA 20196
800MHz@Sprint.com

June 18, 2012

County of Orange
Communications Division
840 N. Eckhoff St., Ste 104
Orange, CA 92868-1021

Re: Sprint Nextel Notification of Initiation of CDMA Operations in the 817-821/862-866 MHz Portion of the 800 MHz Band

Dear Sir or Madam:

Sprint Nextel Corporation ("Sprint Nextel") is sending you this letter because your public safety agency is authorized for operations in the 800 MHz band in the California-North (Region 6) National Public Safety Planning Advisory Committee ("NPSPAC") Region or within 70 miles of Region 6. As required by the FCC, Sprint Nextel is sending this letter to all public safety licensees licensed in or within 70 miles of the boundaries of NPSPAC Region 6.

Sprint Nextel is providing notification that it plans to commence operating a broadband technology network (using Code Division Multiple Access or "CDMA" technology) on a portion of its wholly owned and authorized 800 spectrum in the 817-821 MHz/862-866 MHz portion of the 800 MHz band **after July 20, 2012**. Sprint Nextel's CDMA deployment will neither impact the ongoing 800 MHz band reconfiguration initiative nor any pending retunes. Sprint Nextel will also continue operating its iDEN® Network in the 800 MHz band until mid-2013. Our new 800 MHz band CDMA operations will enhance Sprint Nextel's existing CDMA service which has operated in the 1.9 GHz band since approximately 1994. **Our 800 MHz CDMA operations will initially be deployed in the San Francisco-San Jose-Oakland metropolitan area of the California-North NPSPAC Region, but will eventually expand throughout the entire NPSPAC Region and in neighboring NPSPAC regions.**

Sprint Nextel is mindful of its ongoing obligation to avoid causing Commercial Mobile Radio Service ("CMRS") – public safety interference in the 800 MHz band and to immediately correct such interference should it arise. Sprint Nextel will implement its new CDMA service in full compliance with the FCC's co-channel separation requirements and will carefully evaluate all relevant local factors to assure that interference does not occur.

June 18, 2012

Page 2

If at any time, however, you believe that your 800 MHz public safety radio system is experiencing CMRS – public safety interference within your area of operations, you should report it using the industry-developed and maintained interference notification website at <http://www.publicsafety800mhzinterference.com>. This website immediately notifies Sprint Nextel and other cellular carriers operating in your area to commence interference investigation and mitigation procedures in accordance with the FCC's mandated interference response timelines and requirements specified in Section 90.674 of the FCC's rules.

Sprint Nextel is also notifying the Regional Planning Coordinator ("RPC") for Region 6, as well as the RPCs for Regions 3 (Arizona), Region 5 (California-South), Region 27 (Nevada), and Region 35 (Oregon), that Sprint Nextel intends to initiate 800 MHz CDMA operations starting in July. The RPC is available to you as an additional resource in the event you believe you are experiencing interference from any commercial carrier.

We look forward to our continued work with you and your neighboring agencies to complete 800 MHz band reconfiguration. Should you have any questions in this matter, please contact me at 800MHz@Sprint.com, or contact the Sprint Nextel Program Manager responsible for your retune.

Sincerely,

/s/ James B. Goldstein

James B. Goldstein
Director – Spectrum Reconfiguration

EXHIBIT

C



**SHERIFF-CORONER DEPARTMENT
COUNTY OF ORANGE
CALIFORNIA**

**COMMUNICATIONS & TECHNOLOGY
DIVISION**

**SANDRA HUTCHENS
SHERIFF-CORONER**

February 28, 2012

Rick Kaplan, Chief
Wireless Telecommunications Bureau
Federal Communications Commission
445 12th Street SW
Washington, DC 20554

Please reference the attached Sprint Nextel notification letter dated January 10, 2012.

The Orange County Sheriff's Department operates and maintains the 800 MHz Countywide Coordinated Communications System. This system is used for public safety radio communications by the County of Orange and all thirty four incorporated cities. Over 135 public safety agencies use the system with over 20,000 mobile and handheld radios. The radio system has been plagued with cellular telephone interference from its inception.

The Department is protesting Sprint Nextel's plan to deploy CDMA technology in the 817-821 MHz/862-866 MHz portion of the 800 MHz band before public safety can relocate away from Sprint to the bottom of the band. The Department believes that it will incur significant interference to our communications system, specifically in the Public Safety NPSPAC band between 866 MHz and 869 MHz. Our belief is based on the significant interference currently caused by AT&T Wireless operating CDMA technology, in a similar fashion, adjacent to our frequencies directly above 869 MHz. The County does not believe that prior FCC 800 MHz rebanding decisions contemplate or authorize Sprint Nextel's deployment prior to the completion of rebanding, which completion has not occurred in the Wave 4 border impacted region due to U.S.-Mexico negotiations.

Typical interference seriously disrupts radio communications of our critical public safety field units. It is very time consuming and expensive to mitigate. Even with the best intentions of our local cellular providers, several of our most recent cases of interference have not been fully resolved. They have only been "band-aided."

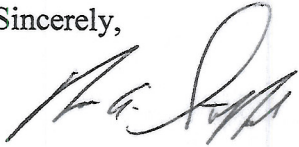
840 N. ECKHOFF STREET, SUITE 104, ORANGE, CA 92868-1021 (714) 704-7900 FAX (714) 704-7902

*Integrity without compromise. Service above self. Professionalism in the performance of duty.
Vigilance in safeguarding our community*

The consolidated deployment of 800 MHz CDMA spectrum is one of Sprint's benefits for funding the Reconfiguration Project. Sprint should not be allowed to proceed with this benefit at the expense of increased public safety interference while the Reconfiguration project is stalled-out in Wave 4.

We look forward to discussing this matter with you and your staff. Please direct any questions concerning this letter to Joseph Saddler at 714-704-7937.

Sincerely,

A handwritten signature in dark ink, appearing to read 'R. Stoffel', written in a cursive style.

Robert Stoffel
Director/Communications & Technology Division

Cc: James Barnett Jr., Chief; Public Safety and Homeland Security Bureau
Transition Administrator
David Buchanan, Region 5 Coordinator
James B. Goldstein, Director; Spectrum Reconfiguration

EXHIBIT

D



Sprint Nextel
12502 Sunrise Valley Drive
Reston, VA 20196
Office: (703) 433-4212

May 17, 2012

Sharon Bowers, Chief
Consumer Inquiries & Complaints Division
Consumer & Governmental Affairs Bureau
Federal Communications Commission
445 12th Street, SW
Washington, D.C. 20554

Re: IC # 12-C00381944-1
Complaint of Robert Stoffel
Notice of Informal Complaint dated April 18, 2012

Dear Ms. Bowers:

Sprint Nextel is in receipt of the above-referenced complaint of Robert Stoffel ("Mr. Stoffel"). This complaint was served to Sprint Nextel on April 18, 2012 and was first forwarded to the Sprint Nextel Executive & Regulatory Services Department and then to Sprint Nextel's Government Affairs Department.

Mr. Stoffel is the Director of the Communications and Technology Division of the Orange County, California Sheriff's Department ("Orange County"). Mr. Stoffel's letter referenced correspondence Orange County received from Sprint Nextel in January 2012 regarding Sprint Nextel's planned deployment of CDMA wireless technology in the 800 MHz spectrum band – the same spectrum band used by the Orange County 800 MHz public safety communications system. Mr. Stoffel's letter was in response to an FCC requirement that Sprint Nextel provide advance notice of changes it was undertaking in its 800 MHz wireless technology. Mr. Stoffel's letter, however, was erroneously forwarded within the FCC to the Consumer Affairs Division and to your office. Mr. Stoffel's letter is not a consumer complaint regarding Sprint Nextel's wireless services, billing practices or rates. Mr. Stoffel's letter involves the 800 MHz band reconfiguration process which is the subject of a long-running proceeding at the FCC and is in the process of being completed across the country under the supervision of the FCC's Public Safety Homeland Security Bureau.

In response to Mr. Stoffel's letter, Sprint Nextel representatives held a one-hour conference call with Mr. Stoffel and his colleagues to discuss the 800 MHz band reconfiguration process and discuss efforts to resolve ongoing commercial mobile radio service interference to Orange County, CA's public safety communication system. We also discussed the significant testing Sprint Nextel has undertaken to ensure that harmful interference does not result from our CDMA deployment as we transition from our current 800 MHz iDEN operations. Our conversation allowed for an improved communications path between our organizations.

Sharon Bowers, Chief
May 17, 2012
Page 2

Sprint Nextel believes that your office can close this matter. The issues that Mr. Stoffel's letter raises are issues that are subject to FCC oversight by the Public Safety and Homeland Security Bureau and we will be working closely with Orange County to reconfigure their 800 MHz system in the coming years to reduce the possibility of harmful interference in the 800 MHz band.

Should you have any further questions in regards to this matter, please contact the undersigned at James.Goldstein@sprint.com.

Sincerely,

/s/ James B. Goldstein

James B. Goldstein
Director – Spectrum
Sprint Nextel Corporation

Cc Robert Stoffel
Orange County Sheriff's Department
840 North Eckhoff Street, Suite 104
Orange, CA 92868-1021

CERTIFICATE OF SERVICE

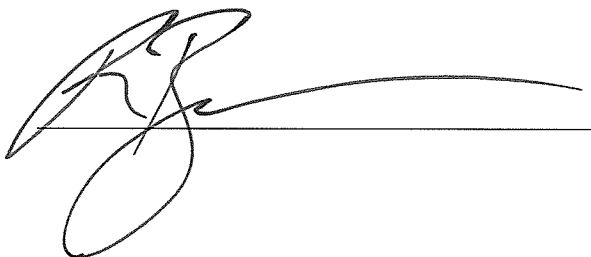
I, Ryan Baron, hereby certify that on this 9th day of July 2012, I have caused a copy of this Petition for Reconsideration and Informal Complaint to be sent electronically to the following:

Bill Roughton
AT&T
1120 20th St, NW
Washington, DC 20036

James Goldstein
Sprint Nextel
12502 Sunrise Valley Drive
Reston, VA 20196

Brian Regan
Federal Communications Commission
445 12th St, SW
Washington DC 20554

Brian Wilhelm
Federal Communications Commission
445 12th St, SW
Washington DC 20554

A handwritten signature in black ink, appearing to be 'RB', is written over a horizontal line.